

Translation

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference PCT-0403	FOR FURTHER ACTION	See Form PCT/IPEA/416
International application No. PCT/JP2004/011458	International filing date (day/month/year) 10.08.2004	Priority date (day/month/year) 11.08.2003
International Patent Classification (IPC) or national classification and IPC A23L3/36, F25D11/02		
Applicant YUGENGAISHA SUN WORLD KAWAMURA		

1.	This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
2.	This REPORT consists of a total of <u>4</u> sheets, including this cover sheet.
3.	This report is also accompanied by ANNEXES, comprising: a. <input checked="" type="checkbox"/> (sent to the applicant and to the International Bureau) a total of <u>1</u> sheets, as follows: <input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions). <input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box. b. <input type="checkbox"/> (sent to the International Bureau only) a total of _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).
4.	This report contains indications relating to the following items: <input checked="" type="checkbox"/> Box No. I Basis of the report <input type="checkbox"/> Box No. II Priority <input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability <input type="checkbox"/> Box No. IV Lack of unity of invention <input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement <input type="checkbox"/> Box No. VI Certain documents cited <input type="checkbox"/> Box No. VII Certain defects in the international application <input type="checkbox"/> Box No. VIII Certain observations on the international application

Date of submission of the demand	Date of completion of this report
Name and mailing address of the IPEA/JP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2004/011458

Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
 - ☐ This report is based on translations from the original language into the following language _____, which is the language of a translation furnished for the purposes of:
 - ☐ international search (Rule 12.3 and 23.1(b))
 - ☐ publication of the international application (Rule 12.4)
 - ☐ international preliminary examination (Rule 55.2 and/or 55.3)
2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:
 - ☐ the international application as originally filed/furnished
 - ☒ the description:
 - pages 1-18 _____ as originally filed/furnished
 - pages* _____ received by this Authority on _____
 - pages* _____ received by this Authority on _____
 - ☒ the claims:
 - nos. 2-4, 6-11 _____ as originally filed/furnished
 - nos.* _____ as amended (together with any statement) under Article 19
 - nos.* 1, 5 _____ received by this Authority on 14.01.2005
 - nos.* _____ received by this Authority on _____
 - ☒ the drawings:
 - sheets 1-4 _____ as originally filed/furnished
 - sheets* _____ received by this Authority on _____
 - sheets* _____ received by this Authority on _____
 - ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.
3. ☐ The amendments have resulted in the cancellation of:
 - ☐ the description, pages _____
 - ☐ the claims, nos. _____
 - ☐ the drawings, sheets/figs _____
 - ☐ the sequence listing (*specify*): _____
 - ☐ any table(s) related to sequence listing (*specify*): _____
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
 - ☐ the description, pages _____
 - ☐ the claims, nos. _____
 - ☐ the drawings, sheets/figs _____
 - ☐ the sequence listing (*specify*): _____
 - ☐ any table(s) related to sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2004/011458

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	2, 7	YES
	Claims	1, 3-6, 8-11	NO
Inventive step (IS)	Claims		YES
	Claims	1-11	NO
Industrial applicability (IA)	Claims	1-11	YES
	Claims		NO

2. Citations and explanations (Rule 70.7)

Document 1: JP 62-297677 A (Matsushita Electric Industrial Co., Ltd.), 24 February 1987

Document 1 discloses a fridge-freezer having shelves on which food is placed provided therein, wherein said food shelves are used as electrodes to form a high-voltage electric field, the external casing and some of the shelves act as the earth potential, and the remaining food shelves act as a positive or negative potential, thereby making it possible to apply to the food a DC current that is of a higher voltage than the high-voltage power source; and a food refrigeration and food preservation method that uses said refrigerator (the embodiments).

Moreover, document 1 indicates that the effect of the magnetic field becomes more effective if an AC current is used alongside a DC current.

The invention set forth in claims 1, 3-6 and 8-11 lacks novelty over document 1.

The fridge-freezer disclosed in document 1 does not appear to apply a positive and a negative potential simultaneously to the shelves when applying a DC current

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2004/011458

Box No. V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;
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and, therefore, with a negative potential on the food shelves, a minus DC current is applied to the food.

Moreover, document 1 is considered to disclose the feature wherein an AC current is applied with a DC current in the fridge-freezer.

Consequently, it is not possible to distinguish between the invention set forth in claims 1, 3, 4-6 and 8-11 and the invention disclosed in document 1.

The invention set forth in claims 1, 3-6 and 8-11 does not involve an inventive step in the light of document 1.

A person skilled in the art would be able to configure the fridge-freezer disclosed in document 1 so that an AC current can be used alongside a DC current, as suggested in document 1.

The effects exhibited by applying such a feature would not go beyond the effects expected by a person skilled in the art.

The invention set forth in claim 2 and 7 lacks novelty over document 1.

A person skilled in the art could also conceive of using only a DC current or an AC current instead of using DC and AC together.

The effects of applying this feature are of no particular significance.